

17. The method of claim 1 or 5, wherein said left and right T-DNA border sequences are derived from TL-DNA of octopine plasmid pTiA6.
18. The method of claim 1 or 5, further comprising a selection marker for incorporation of heterologous DNA into said vector.
19. The method of claim 1 or 5, wherein said selection marker comprises a *sacB* gene, and wherein when heterologous DNA is inserted into unique restriction endonuclease cleavage site of said vector, said *sacB* gene is inactivated.
20. The method of claim 1 or 5, further comprising a selection marker for introduction of said heterologous DNA into *Escherichia coli*.
21. The method of claim 1 or 5, wherein said selection marker comprises a kanamycin resistance gene.
22. The method of claim 6, further comprising a selection marker for the introduction of said heterologous DNA into *Agrobacterium tumefaciens*.
21. The method of claim 1 or 5, further comprising a selection marker for introduction of said heterologous DNA into a non-plant eukaryotic cell, said selection marker located between said left and right T-DNA border sequences.
22. The method of claim 1 or 5, wherein said selection marker is located adjacent to said left T-DNA border sequence.
23. The method of claim 21, wherein said kanamycin resistance gene comprises a GUS-NPTII gene.
24. The method of claim 20, wherein said selection marker comprises a hygromycin resistance gene.

25. The method of claim 1 or 5, wherein said backbone further comprises an origin of conjugal transfer.
26. The method of claim 25, wherein said origin of conjugal transfer comprises an oriT origin from plasmid RK2.
27. A non-plant eukaryotic host cell containing a vector, said vector comprising:
- a) a backbone which includes a first origin of replication capable of maintaining heterologous DNA as a single copy in *Escherichia coli* host cell;
  - b) a unique restriction endonuclease cleavage site for insertion of heterologous DNA; and
  - c) left and right *Agrobacterium* T-DNA border sequences flanking said unique restriction endonuclease cleavage site, said left and right T-DNA border sequences allowing introduction of heterologous DNA located between left and right T-DNA border sequences into a non-plant host cell;
  - d) a heterologous DNA inserted at said unique restriction endonuclease cleavage site; and
  - e) a second origin of replication capable of maintaining heterologous DNA as a single copy in an *Agrobacterium tumefaciens* host cell.
28. The non-plant eukaryotic host cell of claim 27, wherein the host cell is a yeast cell.
29. The non-plant eukaryotic host cell of claim 27, wherein the host cell is a mammalian cell.
30. The host cell of claim 27, wherein the heterologous DNA is from a eukaryotic cell.
31. The host cell of claim 27, wherein the heterologous DNA is from a prokaryotic cell.

32. A method of isolating a DNA encoding a desired gene product from a genomic library of DNA comprising:
- a) inserting heterologous DNA from a genomic library of DNA into a vector, said vector comprising:
    - i) a backbone which includes a first origin of replication capable of maintaining heterologous DNA as a single copy in *Escherichia coli* host cell;
    - ii) a unique restriction endonuclease cleavage site for insertion of heterologous DNA; and
    - iii) left and right *Agrobacterium* T-DNA border sequences flanking said unique restriction endonuclease cleavage site, said left and right T-DNA border sequences allowing introduction of heterologous DNA located between left and right T-DNA border sequences into a non-plant host cell;
  - b) introducing the resulting vector, into said non-plant host cell; and
  - c) expressing said heterologous DNA in said non-plant host cell so as to produce the gene product encoded by said heterologous DNA,
  - d) screening the cultured host cells for those cells that express the desired gene product, and
  - e) isolating the DNA encoding the desired gene product from those cells that express the desired gene product.